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COLONY OF SEYCHELLES

ANNUAL REPORT

OF THE

MEDICAL AND HEALTH

DEPARTMENT

FOR THE YEAR

1953.





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1953

Annual Report of the Medical and Health Department of Seychelles for the year 1953.

I. ADMINISTRATION

Staff : A. The following changes and staff postings took place during the year 1953.

1. Mr. E. L. R. Harter, Dental Surgeon, returned from leave on 8.9.53 and assumed duty on the same day.
2. Dr. K. Sperber, O.B.E., left the Colony prior to transfer on 15.3.53.
3. Miss N. B. Cahill, Senior British Nursing Sister, left the Colony on termination of her secondment from Northern Rhodesia on 15.3.53.
4. Mr. H. W. Cotton, Laboratory Technician, left the Colony on 8.11.53 on termination of his contract.
5. Mr. R. O. Lunn, Laboratory Technician, arrived in the Colony and assumed duty on 8.11.53.

B. The establishment of Senior Medical Staff in 1953 was as follows :—

- 1 Director of Medical Services
- 6 Medical Officers
- 2 Dental Surgeons
- 1 Matron, Seychelles Hospital
- 1 Sister Tutor
- 1 Senior Health Inspector.

C. The establishment of Medical Officers was not filled there being one vacancy during the whole year and a second vacancy from March 15th 1953. The post of Matron was vacant for most of the year.

2. *Legislation* :—

The following legislation of a medical or sanitary nature or having a bearing on these subjects, was made during the year.

Ordinance No. 3 of 1953 The Venereal Disease (Amendment) Ordinance 1953.

- Subsidiary* :
- i. Quarantine Regulations 1953.
 - ii. Quarantine (Amendment) Regulations 1953 revoking (i).
 - iii. Cascade Cemetery Regulations 1953.
 - iv. Animal (Diseases and Importation) Regulations 1953.

3. *Financial ;*

The table hereunder shows the Revenue and Expenditure of the Medical Department during 1953. All figures are in Rupees. For the purpose of comparison figures for 1951 and 1952 are given also.

	1953	1952	1951
	Rs.	Rs.	Rs.
Revenue	74,963	63,390	59,835
Estimated Expenditure	601,375	628,586	419,902
Actual Expenditure	568,588	648,269	494,892
Total Expenditure of Colony	4,613,119	5,180,619	4,211,392
Medical expenditure per head of population	15.01	17.70	15.24

4. *Stores :*

1. Stocks of drugs and medical requisites continued to be held on a basis of six months supply in most items and some in larger amount. There have been several periods when certain drugs, penicillin — insulin etc., have been in short supply or almost out of stock due to the communication difficulties which Seychelles experiences. Drugs which are "dated", such as insulin cannot be held in too large stocks unless we are to run the risk of having to destroy stocks which have passed their expiry date.

2. An emergency supply of drugs and other medical necessities is maintained on the basis of 6 months supply the existing stock being "turned over" when new supplies arrive.

PUBLIC HEALTH.

1. *General :*

The year 1953 passed without the occurrence of any epidemic in the Colony. Whooping cough occurred rather more often than in the previous year but as it is not notified the exact figure cannot be stated. The usual maladies including the venereal disease group, intestinal infestations and tuberculosis, were the source of much work during the year and details of these are given below.

A. **General**

2. *Venereal Disease :*

The Venereal Disease Control Scheme came into force on August 1st 1952 and the Venereal Disease Ordinance became law on November 1st 1952. 1953 was the first complete year in which these diseases were legally notifiable and this measure has given a reasonably accurate picture of what was happening during that twelve month period.

B. **Syphilis**

Syphilis occurred during 1953 and the three previous years as follows :

Stage of disease	1953	1952	1951	1950
Primary & Secondary	45	133	199	266
Latent & tertiary	178	388	385	894
Congenital	4	13	49	77

An analysis of the occurrence of syphilis during the year is interesting as it indicates a substantial decline particularly in early syphilis.

EARLY SYPHILIS (*Primary & Secondary*).

Quarter of year	Male	Female	Total
January — March	16	10	26
April — June	7	6	13
July — September	2	1	3
October — December	2	1	3

LATE SYPHILIS (*Latent, Tertiary, etc.*)

Quarter of year	Male	Female	Total
January — March	14	19	33
April — June	36	24	60
July — September	28	26	54
October — December	54	21	75

CONGENITAL SYPHILIS.

Quarter of year	Number
January — March	Nil
April — June	2
July — September	1
October — December	1

SYPHILIS : OTHER INDICATIONS :

<i>Maternity Department :</i>	1953	1950
Percentage of pregnant women K. R. plus	5%	21%
	1953	1952
Antenatal cases K. R. plus	5%	11.1%

Laboratory Kahn tests :—

Year	Number done	Percentage Positive
1953	6228	18.10
1952	5618	20.68
1951	4911	23.00
1950	4774	38.07

Syphilis Conclusion :

The figures given above leave little doubt that syphilis is on the decline. The marked diminution in the number of early cases during the year appears to indicate that infectious cases are now few although there is still a considerable number of older cases infected in bygone years. Persistence with the finding and treating of these cases will lead eventually to a state where syphilis should no longer be a public health problem in Seychelles.

C. GONORRHOEA.

This disease has unfortunately not diminished and although contacts of cases have been sought assiduously and treated when found infectious the total incidence is almost similar to that of 1952.

Gonorrhoea — all forms :

Male	Female	Children	Total
745	221	17	983

Total Gonorrhoea cases in years :

1953	1952	1951	1950
983	927	546	1201

The one bright spot in this sad story is the reduction in the number of complications of gonorrhoea notified during the year. These were :

Salpingitis	18
Batholinitis	4
Arthritis	2
Ophthalmia	5

Gonorrhoea conclusion :

The V. D. Control scheme appears to have failed to make any marked impression on the incidence of gonorrhoea.

D. CHANCROID.

Until 1953 this disease has not been diagnosed in Seychelles or at least not in recent years. Whether it is a new importation or whether it has been missed in former years cannot be accurately stated. The cases found were :

Male	22
Female	3
Total	<hr/> 25 <hr/>

Female contacts of chancroid cases were all treated with sulpha drugs whether there was evidence of sores or not.

3. *Intestinal Infestations :*

There has been little change in the incidence of these diseases and the following figures give some idea of their incidence, these figures being the result of stool specimens examined in the Seychelles Laboratory.

1953				
Parasite	Number	%	%1952	%1951
Total stool examinations	6299			
E. Histolytica	488	7.9%	9.1%	7.4%
Giardia Lamblia	693	11.1%	13.7%	13.8%
Ankylostoma	793	11.9%	10.3%	10.1%
Ascaris	2393	38.3%	37.5%	38.0%

4. As stated last year endeavours are being made to enlist the services of the World Health Organisation in combatting these infestations as the Colony cannot, for reasons of staff and finance, hope to fight these diseases with — any hope of success. Under the heading of "Tuberculosis" later in this report will be noted an analysis of the condition of houses and sanitary facilities in a section of Seychelles. These figures, as regards sanitation, indicate why these diseases persist from year to year.

5. The financial drain on the Medical Department budget in providing vermifuges (largely chenopodium), emetine etc., for amoebiasis and mepacrine for giardiasis is considerable as all these drugs are expensive. Over 16,000 worm treatments were given in the year under review but treatment without corresponding sanitary improvement can only be regarded as a palliative and not as a cure.

Tuberculosis :

This has shown an increased incidence compared with former years. Whether this is a real increase or whether increased use of X-Rays in diagnosis has shown up a pre-existing condition is not known. Possibly both factors play some part in the apparent upswing in the incidence.

CASES

Type of disease	1953	1952	1951	1950
Pulmonary	128	83	86	60
Non-pulmonary	17	17	18	24
Total	145	100	104	84

DEATHS

Type of disease	1953	1952	1951	1950
Pulmonary	26	35	40	25
Non-pulmonary	5	2	2	7
Total	31	37	42	32

Survey :

An X-Ray survey of 771 persons was completed in 1953. It indicated that of those whose chests were X-rayed 30 showed definite signs of active disease or 4.2% of the total. The survey was carried out on the following classes of persons :

Labourers
 School Teachers
 Secondary School Pupils
 Nurses
 Civil Service Candidates.

Allowing for errors in sampling it is obvious that the disease incidence justifies active measures.

Sanatorium :

Provision was made in the Estimates for 1954 for the sum of Rs. 100,000 for the purpose of constructing a 60 — 70 bed sanatorium in Seychelles. A further sum, it is assumed, will be voted in 1955 Estimates to complete and equip the sanatorium. At present there is no accommodation set aside for the treatment of this disease and only a very few cases are treated at all. A few cases treated with Streptomycin, P. A, S. and Isoniazid have shown favourable results but it is considered a bad policy to treat open tuberculosis cases in general wards of a hospital.

Domiciliary treatment of tuberculosis in Seychelles has been considered, but as housing conditions in the vast majority of cases are poor it is essential that some form of hospital accommodation is necessary. This is made even more necessary owing to the poverty of many of these cases and the probability that their diets would be inadequate.

Housing :

A survey of housing made by a representative of World Health Organisation has shown the following figures :—

1223 houses surveyed in Victoria, North and South Mahe.

Family units in these houses	1749
Total population involved	5884
Number of family units per house	1.43
Number of habitable rooms per house	3.18
Number of habitable rooms per family	2.23
Number of people per house	4.81

41% of family units pay Rs. 10 or less as rent per month.

Overcrowding (at 35 sq. ft. per person) 25% family units overcrowded.

Ventilation — 54% of houses have inadequate permanent ventilation.

Sanitary Accommodation :

- i. 9% of these were satisfactory (inc. water closets)
- ii. 5% of pit latrines good, 11% fair, 84% poor.
- iii. 1% of bucket latrines good, 6% fair, and 93% poor.

Water supplies :

9% water laid on — 25% in compound — 51% nearby and 15% streams. Bathing facilities absent in 75% of cases.

Structural condition :

9% good — 27% fair — 64% poor.

This housing survey, which will continue until all houses on the main islands are surveyed, indicates that the housing conditions are not satisfactory except in small proportion of cases.

Both intestinal infestations and tuberculosis must tend to be fostered in such conditions and the mere treatment of such diseases without adequate improvement of housing and sanitary facilities must be foredoomed to failure.

5. Leprosy.

2 cases were diagnosed in 1953 compared with 8 cases in 1952. Of these both cases were admitted to Curieuse Leprosy Settlement, a report of which will be found later on in this report.

6. *Other communicable diseases ;*

- i. *Enteric Fevers* : No case was diagnosed in 1953 as against two cases and one carrier in 1952.
- ii. *Diphtheria* : 1953 — Nil : 1952 — 2
- iii. *Malaria* : All cases are imported there being no anopheles in Seychelles, 1953 — 1. 1952 — 1.
- iv. *Measles* (Morbilli) — 1.
- v. *Chickenpox* — 8.
- vi. *Filiariasis* : Nil.
- vii. *Influenza* : 564.
- viii. *Diarrhoea and Enteritis* : 673.

7. *Deaths from Communicable disease :*

Recorded deaths from communicable diseases in 1953 were as follows :—

	1953	1952
Pulmonary Tuberculosis	26	32
Other Tuberculosis	5	2
Congenital syphilis	4	2
Neural syphilis		1
Other syphilis	5	14
Dysentery all forms	9	2
Leprosy	4	4
Helminthic disease	7	1
Gastro-Enteritis	20	26

8. *Vaccinations and Inoculations :*

The table herewith shows the total number of these carried out during the year with comparable figures for the two previous years.

	1953	1952	1951
Smallpox vaccination	4617	1683	967
Yellow Fever Inoculation	333	351	410
T. A. B. Inoculation	48	23	47
Cholera Inoculation	75	47	161
Tetanus Immunisation	3	45	48

A campaign of smallpox vaccination in the districts was carried out during the latter part of the year and the result is indicated in the total shown in the table above. In the past four years about 12,000 persons have been vaccinated against smallpox. Each year children born are vaccinated in babyhood. Seychelles is in steamer contact with Bombay where smallpox is always present.

9. *Hygiene and Sanitation :*

The Health Department consists of a Senior Health Inspector assisted by five Inspectors, two probationers and a number of other workers including mosquito searchers. The work done in this section of the Medical Department is indicated below.

i. *Inspection of premises :*

Dwellings	12498
Bakehouses	228
Shops	272
Schools	82
Restaurants & Buvettes	79
Total	13159

ii. *Latrine Inspection.*

Latrines Inspected	9345
In sanitary condition	7702
In insanitary conditions	1643

iii. *Abatement of Nuisances :*

Abatement of Nuisance orders issued.

(a) Removal of pigs or provision of styes	50
(b) Removal of pigs	13
(c) Insanitary latrines	35
(d) Repair of latrines	48
(e) Absence of latrines	3
(f) Accumulation of garbage	15
(g) Accumulation of water	4

iv. *Anti-Mosquito Work :*

The presence of mosquito larvae is included in inspection of premises but in addition to these 4327 inspections were made especially to discover mosquito larvae or other indications of mosquito breeding.

Aedes Aegypti Index 1.3%

10. *Food :*

The table below shows the number of animals slaughtered in Victoria and country slaughterhouses during the year.

Animal	Victoria	Country	Total
Cattle	204	115	319
Pigs	459	636	1095
Turtles	253	42	295
Total	916	793	1709

1. *Port Sanitation :*

All vessels coming from malarial ports are examined for the presence of anopheles larvae and, if necessary, the vessel or parts of it, are sprayed with insecticides. Fortunately the larger vessels coming to Seychelles are compelled to lie out at a distance of about three miles from the Mahe shore although much closer to St. Anne Island. This fact limits the possibility of malarial mosquitoes gaining access to the Colony. Smaller ships do come into the inner harbour but only after they have been examined and sprayed.

All passengers entering Seychelles must possess a valid certificate of vaccination against smallpox and if the passenger comes from a delineated yellow fever area he must, in addition, possess a certificate of vaccination against yellow fever. Any person not possessing these certificates is liable to be detained on Long Island Quarantine Station and in 1953, 13 men from East Africa were detained for three days owing to non-possession of a yellow fever certificate.

In 1953, 51 vessels entered Victoria harbour plus 4 of H. M. Navy. The ports from which the vessels came (last ports of call) and nationalities are given below.

Mombasa	23
Bombay	9
Mauritius	6
Aden	4
Beira	2
Madagascar	2
Singapore	2
Colombo	1
Melbourne	1
Dar-es-Salaam	1

Nationality of Commercial Vessels.

British	49
Dutch	2
Danish	2
Norwegian	1

Aircraft.

One flying boat (Catalina) from Mombasa in January, 1953.

12. *Legal Proceedings :*

230 persons were prosecuted for infringements of public health law and were fined a total of Rs. 169.00. At 31.12.53, 9 cases were awaiting a hearing by the court.

Vital Statistics :

1. The table below gives figures relevant to the year 1953.

Estimated Population at Mid Year (30th June 1953)	37,876
Total deaths	438
Death rate per 1000	11.6
Total Births	1185
Birth rate per 1000	31.3
Total deaths under 1 year	64
Infantile mortality	54.00

2. This table shows birth, death and infant mortality figures for each year since 1940.

<i>Year</i>	<i>Birth Rate</i>	<i>Death Rate</i>	<i>Infant Mortality</i>
1940	26.21	11.40	59.59
1941	24.75	11.82	44.85
1942	25.01	14.50	
1943	25.40	12.05	64.41
1944	24.94	14.48	63.00
1945	25.42	10.89	62.86
1946	28.42	11.32	59.80
1947	27.10	10.20	80.12
1948	28.60	13.70	89.00
1949	29.20	12.10	70.53
1950	29.80	11.70	60.00
1951	28.30	11.60	50.30
1952	28.00	12.10	51.10

Dental Health :

Mr. E. R. Harter returned from overseas leave on 8.9.53. Mr. A. Gapper continued as Dental Surgeon during the whole year.

2. Herewith summary report of dental work carried out for Government during the year 1953.

School Dental Service. — Free or Gratuitous.

<i>Extractions</i>	<i>Fillings</i>	<i>Scalings</i>
1006	818	8

Special Cases :

Three surgical Extractions.
 Dressings of septic sockets.
 One orthodontic case.
 One alveolar abscess opened.
 One cyst of eruption opened.
 Six cases of acute Vincent's admitted and treated.

3. *Public Dental Service. — Free.***Paupers.**

<i>Extractions</i>	<i>Dressings</i>	<i>Fillings</i>	<i>Scalings.</i>
1965	87	100	20

4. *Government Employees :*

<i>Extractions</i>	<i>Dressings</i>	<i>Fillings</i>	<i>Scalings.</i>
990	107	444	65

5. *Special cases :*

- i. Four abscesses incised and drained.
- ii. Two socket curettages.
- iii. Five gingivectomy operations.
- iv. Eight X-Rays.
- v. One Vincent's condition of the mouth.
- vi. One crown re-inserted.
- vii. One Caldwell-Luc Maxillary Sinus operation.

6. *Fee-Paying Service :*

Emergency extractions on out patients Clinic — 442.
 Appointments sessions — 1400 approx.

7. *Prosthetic Work :*

Full Dentures in Acrylic	14
Partial Dentures in Acrylic	29
Repairs Dentures in Acrylic	42

SECTION III.

HOSPITALS AND DISPENSARIES.

1. The principal hospital of the Colony is the Seychelles Hospital in Port Victoria in which the majority of the sick are treated either as in or out patients. Seychelles Hospital has a fully equipped laboratory and a small X-ray plant capable of limited radiology and also clinics for dental and ophthalmological work. Smaller hospitals exist at Anse Royale, Mahe, Bay Ste. Anne, Praslin and on La Digue Island.

2. Out patient dispensaries are held at all the hospitals and in addition there are Clinics at Grand Anse, Praslin, and at Grand Anse, Mahe (Beoliere). At Takamaka in South Mahe a Senior Nurse runs a weekly Clinic.

3. The following table indicates the numbers treated in the various institutions during the year 1953.

Hospital or Clinic	Beds	Inpatients	Out-patients
Victoria	110	3996	36684
Bay Ste Anne	26	518	2113
La Digue	8	143	1768
Anse Royale	8	187	9039
Beoliere	2	35	2680
Grand Anse Praslin	—	—	2235
Takamaka	—	—	397
Total	154	4882	54916
Total (1952)	—	3771	45787

4. From these figures it can be seen that both in-patients and out-patients increased in number to a material degree, the rise of in-patients being approx. 30% over 1952 and of out-patients approx. 20% over 1952. On average every member of the population attended 1.4 times at an out-patient clinic while approx. 12% of the population were in-patients at some time or other during the year. There can be a few places with similar figures which are all the more surprising when the absence of malaria and other tropical diseases is noted.

Surgical.

During 1953 the total number of operations performed in Seychelles Hospital was 1316 of which 234 were major and 1082 were minor. Of the major operations 54 were emergency and the remaining 180 were elective or "cold" cases.

Major operations :

Procedure	Elective	Emergency	Total
Appendicectomy	20	7	27
Laparatomy	2	1	3
Laparatomy Carcinoma of Stomach	2	—	2
Laparatomy Carcinoma of Oesophagus	1	—	1
Laparatomy Carcinoma of Pancreas	1	—	1
Drainage Liver abscess	—	1	1
Drainage thoracic empyema	1	—	1
Subtotal Gastrectomy	2	—	2
Perforated Duodenal Ulcer	—	2	2
Ramstedt's operation	—	1	1
Caeco-colic intussusception	1	1	2
Colostomy	—	1	1
Closure of Colostomy	1	—	1
Hæmorrhoidectomy	1	—	1
Excision rectal prolapse	1	—	1
Excision fistula in ano	1	—	1
Inguinal hernia radical cure	30	11	41
Femoral hernia	1	—	1
Umbilical hernia	—	1	1
Caesarean Section Classical	—	3	3
Caesarean Section Lower Segment	—	10	10
Abdominal Hysterectomy	48	2	50
Vaginal Hysterectomy	2	—	2
Le Forte Operation for procidentia	1	—	1
Ectopic pregnancy	1	4	5
Salpingectomy & Oophorectomy	5	—	5
Radical cure hydrocele	6	—	6
Transplantation ureter	2	—	2
Suprapubic cystotomy	5	2	7
Amputation penis (Carcinoma)	1	—	1
Transplantation of ulnar nerve	1	—	1
Drainage acute osteomyelitis	1	—	1
Compound fractures	—	3	3
Amputations — thigh	1	—	1
do leg	—	1	1
Subtotal thyroidectomy	5	—	5
Cortical mastoidectomy	—	1	1
Dissection of tonsils	24	—	24
Radical mastectomy	1	—	1
Simple mastectomy	1	—	1
Excision breast adenoma	1	—	1
Excision pilonidal sinus	1	—	1
Miscellaneous	8	2	10
Totals	180	54	234

Minor operations :

These numbered 1082 and included such procedures as :—

Cystoscopy ; sigmoidoscopy ; dilation and curettage ; reduction of simple fractures ; urethral dilatation ; myringotomy ; eye operations under local anaesthesia.

Surgical operations 1953/1952.

Total surgical operations 1953 :	1316
Total surgical operations 1952 :	1037

Ophthalmological.

1. Ophthalmological clinic which was initiated in December 1952 continued in operation throughout the year on two days weekly.
2. In the period under review 712 *new* patients were seen.
3. Points of interest noted during the year were :—
 - i. The majority of patients coming for treatment had, as might be expected, errors of refraction of which presbyopia was the commonest.
 - ii. There was a high incidence of pterygium.
 - iii. Ophthalmia neonatorum was comparatively rare.
 - iv. Several cases of granular conjunctivitis were seen which produced little discomfort except for recurring periods of mild conjunctival irritation. Conjunctival scrapings were all negative for trachoma.
 - v. A proportionately large number of choroiditis were seen in which syphilis, contrary to expectation, did not play an important part. This disease was mainly seen in young adults of both sexes who had patches of choroiditis in one or both eyes. The cause of the condition is not known.

4. Conditions diagnosed and treated :

(a) Anomalies of Refractions :

Presbyopia	84
Hypermetropia	3
Myopia	34
Myopic astigmatism	35
Hypermetropic astigmatism	23
Mixed astigmatism	5
Aphakia	2
Insufficiency of accommodation	1
Heterophoria	17
Squints	5

(b) *Congenital anomalies :*

Persistent pupillary membrane	1
Congenital cataract	2
Congenital nystagmus	3
Congenital obstruction of nasolacrimal duct	1

(c) *Injuries :*

Contusion eyelids orbit & eyeballs	25
Dislocated lens	1
Fracture of floor of orbit	2
Wound of eyelids	2
Wounds of conjunctiva	7
Wounds of cornea	12
Burns of cornea	5
F. B. conjunctiva	7
F. B. Cornea	15
F. B. anterior chamber	1
Perforating injury eyeball	1

(d) *Inflammatory :*

Blepharitis	6
Chalazion	38
Stye	19
Simple conjunctivitis	35
Purulent conjunctivitis	29
Ophthalmia neonatorum	2
Phlyctenular conjunctivitis	8
Chronic conjunctivitis	33
Granular conjunctivitis	23
Dacryocystitis	5
Keratitis — Interstitial	3
„ Phlyctenular	8
„ Superficial punctate	3
„ Striate	1
„ Disciform	2
„ Rosacea	2
Corneal ulcers	15
Iritis	15
Iridocyclitis	2
Choroiditis	24
Retinitis Hypertensive	6
„ Diabetic	2
Chorio-retinitis	1

(e) *Degenerative ;*

Pinguecula	9
Pterygium	36
Corneal dystrophy	5
Senile cataract	22
Secondary cataract	1
Optic atrophy	5
Senile ectropion	1

(f) *Other conditions :*

Glaucoma	8
Allergy of conjunctiva and lids	9
Vitreous opacity	3
Vitreous haemorrhage	1
Amblyopia	1
Staphyloma	1
Phisis bulbi	1
Infraorbital neuralgia	1
7th nerve palsy	1
Vitamin deficiency	7
General diseases with eye signs	15

(g) *Tumours :*

Tumours of conjunctiva.	5
„ „ Eyelids	5
„ „ Iris	1
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5. Owing to the absence of certain essential equipment intraocular operations could not be performed. Operations which were performed consisted mainly of those for pterygia, chalazion and removal of tumours and foreign bodies. Necessary instruments for intra ocular surgery are expected to be available in 1954.

X-Ray Department :

1. The machine in use is a portable Watson machine powered by a Leicester generator.
2. A spare tube head was obtained during the year in case existing tube head went out of action and this came to pass in the latter part of the year. The older tubehead is now under repair and a policy of always a spare tubehead in stock will be adhered to in future.
3. The figures below indicate the number of pictures taken during the year.

	1953	1952
Chest	514	213
Lower limb	65	48
Upper limb	73	44
Ribs, sternum & clavicle	4	9
Vertebrae & pelvis	15	18
Skull and jaw	12	6
Dental	4	2
Sinuses	6	1
Visceral	10	4
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Total	703	345
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Mental Hospital.

A new mental hospital was constructed during the year at Canelles, about two miles from the site of the existing mental hospital and was completed, save for fencing at the close of the year.

The existing hospital handled cases as shown in the table hereunder :—

	<i>Male</i>	<i>Female</i>	<i>Total</i>
No. of cases resident at 1.1.53	18	13	31
Cases on trial at 1.1.53	1	7	8
Total cases at 1.1.53	19	20	39
Admissions 1953	—	2	2
Deaths	3	—	3
No. of cases resident at 31.12.53	15	14	29
No. of cases on trial at 31.12.53	1	8	9
Total cases at 31.12.53	16	22	38

Curieuse Leper Settlement :

1. Curieuse Leper Settlement is situated on Curieuse Island which lies adjacent to the island of Praslin.
2. Result on Curieuse in 1953 have been better than for some years past. This is the result of better feeding, better clothing, bedding and housing, the treatment of other diseases in leprosy patients and the increased dosage of D. A. D. P. S. made possible by higher hæmoglobin levels. The clinical condition of the patients improved markedly and even advanced lepromatous cases healed and many cases which have for years been disfigured by macules and nodules are recovering their normal appearance.
3. Hæmoglobin levels in the past year and in the previous year are illustrated in the following table of Hb levels in December 1953 and December 1952.

<i>Hb percentage</i>	<i>No. in 1953</i>	<i>No. in 1952</i>
25 to 34%	Nil	2
35 to 44%	Nil	2
45 to 54%	1	2
55 to 64%	1	6
65 to 74%	3	13
75 to 84%	9	7
85 to 94%	12	Nil
95% plus	7	1

Taking 75% as a mean figure the improvement is shown :—

	1953	1952
Under 75%	5	25
Over 75%	28	8

4. Many cases became bacteriologically negative who had not been so in the past. The table below illustrated the gradual change.

Year	No smears done	No. Pos.	% Pos.	No. Neg.	% Neg.
Dec. 1951	35	32	91.4	3	8.6
Dec. 1952	30	20	66.6	10	33.3
Nov. 1953	25	2	8.0	23	92.0

5. The following table indicates the number of cases in residence and other details.

	Male	Female	Total
Cases resident at 1.1.53	28	18	46
Admission 1953	—	2	2
Discharges 1953	—	—	Nil
Deaths 1953	3	—	3
Cases resident at 31.12.53	25	20	45

6. It will be noted that no cases were discharged in 1953 but at the close of the year six cases had been persistently negative for nine months. It is expected that at least six cases will be ready for discharge in 1954. The results shown support the contention of the writer of this report that a "sanatorium" regime of good food rest in active cases, fresh air and the elimination of other diseases (syphilis, amœbiasis, parasites etc) is essential as a preliminary to therapy with drugs of the sulphone group. Action to implement this was started early in 1952 but it has taken two years for improvement to be appreciable.
7. Coronation celebrations were held on Curieuse Island on June 12 1953 when the Officer Administering the Government, the Attorney General, Director of Medical Services, Commissioner of Inland Revenue and the Elected Member for Praslin and La Digue visited the Settlement. A religious service was conducted by the Rev. Archdeacon of Seychelles which was followed by distribution of Coronation Souvenirs and special meals in honour of the occasion. A firework display concluded the ceremonies after darkness fell.
8. The Settlement was conducted by Staff Nurse Miss R. Furneau B. E. M. under the supervision of the Medical Officer on Praslin while the settlement was visited on three occasions during the year by the Director of Medical Services.

New Constructions 1953 :

1. The new Mental Hospital at Les Canelles was almost complete at 31.12.53 only the fencing of the area remaining to be finished.
2. The new Dental and Ophthalmic Clinic was also complete at the year end and should be in use early in 1954.

3. A Laundry to replace that out of date system at Seychelles Hospital was under construction during the year but will not be ready for use until the latter part of 1954.
4. A house to accommodate the Nurses at Anse Royale Hospital was under construction in 1953 and should be in occupation in 1954. This will then permit the entire hospital to be used for patients.
5. The hot water system which has been in process of installation for over a year was again delayed by shortage of materials. This when complete will give a constant supply of hot water to the Seychelles Hospital.

Training of Staff :

1. Training of Nurses and Midwives continued as in former years but was considerably handicapped by shortage of medical and senior nursing staff, Sister William, Sister Tutor, acted as Matron after 15th March 1953 and her substantive duties could only be performed on a part-time basis. Among those who assisted in the various fields during the year were :—

The Director of Medical Services	— Medical Lectures
Dr. E. R. Simpson	— Surgical Lectures
Sister Tutor	— General Nursing.

2. At the *Final Examination* in July 1953 seven candidates presented themselves. Of these only one passed the full examination, four failed in surgical nursing only and two failed the complete examination. The failures in Surgical Nursing will resit this subject in 1954 while the two complete failures have since resigned.
3. At the *Preliminary Examination* held during the year three candidates were examined of whom two passed and the third failed. This failure was unfortunately for the third time and by the Regulations of the Nursing Board the candidate was debarred from further trial and resigned.
4. At the *Entrance Examination* for newly appointed probationers held three months after acceptance fourteen candidates sat of whom one was a probationer midwife only. Eleven passed, one left the school before the examination was completed and two failed. The failures did not have their appointments as probationers confirmed.
5. *Midwives.* No midwifery lectures were given during the year but two re-entries sat the examination held in 1953 for midwives of whom one passed and the failure resigned.
6. In 1954 it is hoped to appoint a full time tutor to the school and to regain the standard of knowledge attained in the past.

7. Nurses on Nursing Register of Seychelles at 31.12.53 — 39.
Midwives on Midwives Register of Seychelles at 31.12.53 — 56.

SECTION IV.

MATERNITY AND ANTE NATAL SERVICES.

1. There has been a material increase in maternity cases admitted to Seychelles Hospital in 1953 as compared with 1952. The number of labour cases has doubled in the last decade and with the rising population the number should be expected to rise with each succeeding year. The accommodation provided is becoming insufficient for the demands on it. In 1953 it was necessary to reduce the post-natal stay in hospital from 10 to 8 days in order to cope with the rise of cases from 389 in 1952 to 508 in 1953. It should be noted that cases of abortion of early pregnancy, ectopic gestation with or without rupture are treated in general wards and not in the maternity department.
2. *Staff* : Dr. K. Sperber continued as Medical Officer to the Maternity Department until March 1953 when his place was taken by Dr. K. K. Kapadia who continued until the close of the year.
3. *Ante-natal clinics* are held at Victoria Hospital every Wednesday and Thursday. Among cases examined during the year were 13 cases of toxæmia, a large number of iron deficiency cases showing marked anaemia and a declining number of cases of syphilis. This latter disease was detected in only 25 cases out of 508 or about 5% which shows a marked decrease of the figure of 21% in 1950. Smears from cervix showed in a large number of cases some form of infection but only in 8 did gonococci occur. All syphilis cases and cervix infection were treated with penicillin as soon as they were discovered.
4. *Baby Welfare Clinic* : Sessions of this clinic continued during the year on each Friday. Advice on infant feeding and general welfare are given at these clinics. Parents are advised to bring children each week until the child is two months old when the visits may be more widely spaced.
5. *Quadruplets* : The first quadruplets born in Seychelles as far as can be found in records came into this world prematurely on October 15th 1953. Special attention has been paid to these children assistance from the Seychelles Red Cross being gratefully received. Public subscription and a grant of money and free baby food was made by Cow & Gate.
6. *Maternal Mortality* : This has decreased from 5.6 per 1000 live births in 1952 to 2.0 per 1000 live births in 1953.
7. *Infant Mortality* was due, in 50% of cases to prematurity.

8. The following figures gives the number of cases delivered and other relevant details of the work of maternity department.

Maternity Department Statistics 1953.

GROUP A.			GROUP B.		
			Abnormal pregnancies :		
a.	Total admissions	606	a.	Preeclampsia	12
b.	Total labours	510	b.	Hæmorrhage in preg.	2
c.	Babies born	525	c.	Severe anæmia	3
	Male	235	d.	Other disorders	15
	Female	290	e.	Hydramnios	1
d.	False labours	44	f.	Miscarriage	2
e.	Still births	15	g.	Abortion Threatened	3
	Male	10	h.	Abortion Incomplete	3
	Female	5	i.	Abortion complete	1
f.	Macerated Fœti	9			
	Male	3	GROUP C.		
	Female	6	Abnormal labours.		
g.	Syphilis as a cause of stillbirth	Nil	a.	Persistent Occ. Posterior	1
h.	Syphilis as a cause of macerated fœtus	1	b.	Breech cases	19
i.	Illegitimate births	241	c.	Obstructed labour	1
j.	Primipara	146	d.	Prolapse of cord	1
k.	Multipara	264	e.	Prolapse of hand	1
l.	Premature babies	50	f.	Tranverse presentation	2
m.	Maternal deaths	1	g.	Ante-Partum hge.	2
n.	Infant deaths	16	h.	Placenta prævia	2
o.	Ophthalmia	8	i.	Post-partum hge.	24
p.	Sick babies	3	j.	Post-partum hge. small	40
			k.	Multiple pregnancy	
				Twins	9
				Triplets	1
				Quadruplets	1
			l.	Injuries to genital tract	34
			m.	Pyrexia in puerperium	7
			n.	Puerperal sepsis	2
			o.	Syphilis in mothers :	
				K. R. 4 plus	5
				K. R. 3 plus	11
				K. R. 2 plus	10
				K. R. 1 plus	3
				Total K. R. plus	29
			p.	Gonorrhœa	8

Obstetric Operations :

a.	Induction of labour by rupture of membrane	8
b.	Version (internal) and extraction	3
c.	Dilation and curettage	1
d.	Episiotomy	3
e.	Cæsarean section	13
f.	Hysterectomy	1
g.	Perineorrhaphy	2
h.	Repair of cervix	2

Causes of baby deaths :

Aspiration pneumonia	1
Prematurity	8
Asphyxia	4
Anencephaly	1
Congenital heart disease	1
Hæmorrhage of newborn	1

Ante natal Clinic Victoria :

First attendances	508
Repeat attendances	1605
Total attendances	2113

Baby Clinic Victoria.

First attendances	100
Repeat attendances	369
Total attendances	469

Maternity : Other Hospitals.

	Baye Ste Anne	La Digue	A. Royale	Beoliere
Live births	66	44	39	29
Still births	—	—	—	—
Premature births	1	—	2	1
Complicated labour	2	2	—	—
Abortions	4	3	5	—

Ante-natal clinic (other than at Victoria).

Hospital or Clinic	First attendance	Repeat attendance
Bay Ste Anne	41	68
La Digue	52	156
Grand Anse Praslin	24	85
Anse Royale	132	301
Beoliere	37	162

SECTION V.

Laboratory Work :

1. During most of the year the laboratory was under the care and supervision of Mr. H. W. Cotton who was responsible for its expansion and development with the aid of a grant from Colonial Development and Welfare Funds. Mr. Cotton departed on November 8, his contract having expired and his place was taken by Mr. R. O. Lunn who, although he is nominally laboratory technician for the Anti Venereal Disease Scheme carries on the full work of the laboratory.

2. As stated in the Report for 1952 the laboratory is now capable of doing almost any test or procedure normally required by clinical or preventive medicine and the figures below reflect the considerable work done.
3. The Technician is assisted by a Senior Assistant, Junior Assistant, Laboratory Clerk and a Messenger.
4. In 1953 the demand for the services of the laboratory increased once again, the increase over 1952 being 7% overall.
5. The table below gives details of the work carried out during the year under various sub-headings.

(a) *Miscroscopy :*

	<i>Number of Examination.</i>
Skin for B. Leprae	152
Skin for fungi	14
Faeces	6299
Urines	771
Sputa	495
Pus	27
Cerebrospinal Fluids	51
Pleural Fluids	12
Throat swabs	56
Ear swabs	1
Eye swabs	37
Urethral smears	536
Cervical smears	1311
D. G. I.	50

(b) *Bacteriology :*

Faeces	127
Urines for B. Coli	171
Urines for T. B.	10
Sputa for organisms	4
Sputa for T. B.	5
Pus for organisms	16
Pus for T. B.	13
Cerebrospinal fluids for organisms	44
Cerebrospinal fluids for T. B.	—
Pleural fluids for organisms	6
Pleural fluids for T. B.	3
Throat swabs	39
Urethral smears	—
Cervical swabs	3
Eve swabs	20
Ear swabs	3
Blood	7
Skin for fungi	9
Autogeneuous vaccine	2

(c) *Hæmatology* :

Hæmoglobin	844
Red blood counts	532
Reticulocyte counts	12
Sedimentation rate	330
Blood grouping	46
Rh. Grouping	45
White blood counts	561
White cell differentials	557
Bone marrow differentials	—
Blood for malaria parasites	25
Blood for microfilaria	3

(d) *Quantitative Biochemistry* :i. *Blood.*

Sugar	28
Urea	28
Calcium	1
Van-den-Berg	1
Uric acid	2
Liver function tests	2
Cholesterol	2
Total Proteins	4
Globulin	3
Albumin	3
Fibrinogen	3
Acid Phosphatase	3
CO ₂ combining power	1

ii. *Cerébrospinal fluids.*

Protein	45
Chlorides	45
Lange's test	45
Glucose	45
Globulin	45
Cells	45

iii. *Urines.*

Urea clearance test	1
Chloride estimations	1
Ascorbic acid estimations	4

iv. *Gastric contents.*

Fractional test meals	40
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(c) *Chemical examination :*i. *Urines.*

Albumin	1039
Sugar	1087
Sugar %	166
Acetone	145
Bile	143
Blood	38

ii. *Fæces.*

Occult blood test	30
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(f) *Medico-Legal*

Postmortems	9
Blood stains	4
Seminal stains	4

(g) *Histology*

Uterine Curettings	17
Uterus for pathology	5
Thyroids	4
Breast	1
Biopsy and Rodent ulcers	16
Tumours	3
Ulnar Nerve	1

(h) *Serology*

Kahr Tests	6228
Widals — B. Typh O	55
B. Typh H	35
B. Para B. O.	35
B. Para B. H.	35
B. Abortus	35

Cerebrospinal Fluids.

Kahn Tests	45
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(i) *Veterinary Work*

Blood smears	110
Impression smears	89
Fæcal samples	20
Milk samples	4
Worm specimens	5
Sera for agglutination tests	21

(j) *Miscellaneous*

Examination of seminal fluid	1
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(k) *Public Health*

Bacteriological examination of water	1
Bacteriological examination of food	12

(l) *General*

Maintenance and preparation of all sterile water, saline glucose, emetine etc. and of blood transfusion apparatus was also carried out in this department.

The total number of examination carried out in 1953 was 23,001.

6. *Khan Tests Results* : The table below gives the percentage of positives found each year of total Kahns done.

Year	Tests done	Percentage positive
1953	6228	18.10
1952	5618	20.68
1951	4911	23.00
1950	4774	38.00

Of the total Kahn tests done NEW cases of syphilis (i. e. newly discovered cases) were found in the following percentages in the last three years.

1953	7.7%
1952	9.4%
1951	16.6%

It will be remembered that the anti V. D. Scheme started operations in August 1952, although the use of penicillin for syphilis was in operation from late 1951.

Conclusion.

1. The year 1953 has been notable for the marked increase in demand for Medical services of all kinds. The reason for this increase is not clear and the increase is spread over all services. Epidemics do not account for the increase as there has been no epidemic worthy of the name. This increase, moreover, arose when the Department was short of staff.

2. 1953 has also seen the first fruits of preventive medicine in the shape of a material decline in syphilis particularly in the early or infectious stages. A "mopping" up of old cases will have to continue for some time to come but as these are not normally infectious they have little effect from the epidemiological point of view. The decline has been noted in the maternity and ante-natal departments.

3. The first stage in the battle against tuberculosis will start in 1954 when the construction of a sanatorium to take 60/70 cases will begin. Consideration to the housing problem of Seychelles will also be given as mere treatment of cases without improvement of social condition tends to negative the value of such treatment both from the individual and community point of view.

4. Attached to this report are Appendices indicating the number of cases of various diseases seen and treated together with the causes of deaths set out according to the International Classification Scheme.

5. As this will probably be the last Annual Report which the present writer will compile he desires to record with gratitude the assistance and loyalty which the staff of the Department have given him in the years 1951 — 1954 and to thank them for their co-operation under conditions involving extra duties and often long hours of work.

8th March, 1954.

JAMES TAYLOR,
Director of Medical Services.

A P P E N D I X A.

Total Number of cases of individual diseases Diagnosed and treated (1953).

<i>Diseases</i>	<i>Number.</i>
Typhoid fever	—
Paratyphoid fevers	—
Meningitis	1
Scarlet fever	—
Whooping cough	252
Diphtheria	—
Tetanus	5
Tuberculosis (Pulmonary)	128
(Others)	17
Leprosy	2
Dysentery (bacillary)	—
(amoebic)	454
(others)	76
(unspecified)	130
Diarrhoea & Enteritis	673
Malaria B. T.	1
Other protozoal diseases	—

APPENDIX A. — (Contd.)

<i>Diseases</i>		<i>Number.</i>
Syphilis :	Primary & Secondary	45
	Tertiary	178
	Congenital	4
Gonorrhoea :	Acute	783
	Chronic	200
Influenza :	Complicated	—
	Uncomplicated	564
Measles		1
Chicken pox		8
Poliomyelitis		—
Ankylostomiasis		793
Other Helminthic diseases		2393
Filariasis		—
Other infective or parasitic diseases		66
Abscess of liver		12
Other diseases of liver		417
Malignant Tumours		49
Non-Malignant Tumours		28
Unspecified Tumours		43
Rheumatic conditions		597
Diabetes		17
Disease of the Endocrine Glands		43
Other Vitamin Deficiency diseases		15
Disease of blood & blood forming tissues		375
Poisoning — Alcoholic		—
	Other	9
Mental diseases		2
Diseases of the eye		292
Diseases of the ear & mastoid sinus		285
Diseases of the Nervous system		154
Heart diseases		196
Other diseases of the Circulatory System		169
Bronchitis (Acute)		1069
„ (Chronic)		502
Pneumonia (Broncho)		167
„ (Lobar)		86
„ (Unspecified)		72
Other diseases of the respiratory system		693
Nephritis : acute		2
„ chronic		1
Other Non-Venereal diseases of the Genito		
	Urinary System	744
Abortions		45
Toxaemias of pregnancy		2

APPENDIX A. — (*Contd.*)

<i>Diseases</i>	<i>Number</i>
Other conditions of the puerperium	—
Ulcers (Unspecified)	168
Other skin diseases	912
Diseases of the bones etc	142
Congenital malformations	3
Congenital debility	1
Premature birth	1
Injury at birth	1
Other conditions	25
Senility	187
External causes :	
Homicide	—
Suicide	—
Other causes	741
Ill defined causes	216
Other causes	4662
Other diseases of the digestive system	499

CAUSES OF DEATH 1953

Cause Groups Detailed List Numbers

A	1	Tuberculosis of Respiratory System	001 — 008	26
A	4	Tuberculosis of bones and joints	012, 013	1
A	5	Tuberculosis all other forms	014 — 019	4
A	6	Congenital Syphilis	020	4
A	10	All other Syphilis	022, 023, 026 — 029	5
A	16	Dysentery all forms	045 — 048	9
A	20	Septicaemia and Pyaemia	053	2
A	22	Whooping Cough	056	3
A	23	Meningococcal Infection	057	4
A	25	Leprosy	060	4
A	26	Tetanus	061	3
A	34	Infectious Hepatitis	092	1
A	41	Ankylostomiasis	129	3
A	42	Other diseases due to helminths	124, 126, 128, 130	4
A	45	Malignant Neoplasm of Oesophagus	150	1
A	47	Malignant Neoplasm of intestine except rectum	152, 153	3
A	48	Malignant Neoplasm of Rectum	154	1
A	50	Malignant Neoplasm of trachea and of bronchus and lung not specified as secondary	162, 163	1
A	51	Malignant Neoplasm of breast	170	1
A	52	Malignant Neoplasm of cervix uteri	171	5
A	54	Malignant Neoplasm of Prostate	177	2
A	57	Malignant Neoplasm of all other and unspecified sites	155 — 160, 164, 165, 175, 176, 178, 181, 192 — 195, 198, 199	11
A	58	Leukaemia and aleukaemia	204	1
A	60	Benign Neoplasms and neoplasms of unspecified sites	200 — 203, 205	1
A	63	Diabetes mellitus	260	2
A	64	Avitaminosis and other deficiency states	280 — 286	5
A	65	Anaemias	290 — 293	20
A	66	Allergic disorders; all other endocrine, metabolic and blood diseases	240 — 245, 253, 254, 270 — 277, 287 — 289, 294 — 299	7
A	69	Mental deficiency	325	1
Carried forward				135

CAUSES OF DEATH 1953. — (Contd.)

Cause Groups		Detailed List Numbers	
Brought forward			
A 70	Vascular lesions affecting central nervous system	330 — 334	135
A 78	All other diseases of the nervous system and sense organs	341 — 344, 350 — 352, 454 — 369, 380 — 584, 386, 388 — 300, 394 — 398	27
A 81	Arteriosclerosis and degenerative heart disease	420 — 322	7
A 82	Other diseases of the heart	430 — 434	23
A 83	Hypertension with heart disease	440 — 443	27
A 88	Influenza	480 — 483	6
A 89	Lobar pneumonia	490	1
A 90	Bronchopneumonia	491	5
A 91	Primary atypical, other and unspecified pneumonia	492, 493	16
A 92	Acute bronchitis	500	4
A 95	Empyema and abscess of lung	518, 521	2
A 97	All other respiratory diseases	511, — 517, 520, 522 — 527	1
A 103	Intestinal obstruction and hernia	560, 561, 570	3
A 104	Gastro-enteritis and colitis, except diarrhoea of the newborn	571, 572	6
A 105	Cirrhosis of liver	581	20
A 107	Other diseases of digestive system	536 — 539, 542, 544, 545, 573 — 580	3
A 109	Chronic, other and unspecified nephritis	591 — 594	5
A 114	Other diseases of genito-urinary system	601, 603, 605 — 609, 611 — 617, 622 — 635	2
A 126	All other diseases of skin and musculoskeletal system	700 — 716, 731 — 736, 738 — 744	4
A 128	Congenital malformations of circulatory system	754	1
A 129	All other congenital malformations	750, 752, 753, 755 — 759	2
A 130	Birth Injuries	760, 761	3
A 131	Postnatal asphyxia and atelectasis	762	1
A 132	Infections of the newborn	763 — 768	3
A 133	Haemolytic disease of newborn	770	2
A 335	Ill-defined diseases peculiar to early infancy, and immaturity unqualified	773 — 776	2
A 136	Senility without mention of psychosis	794	14
A 137	Ill-defined and unknown causes of morbidity and mortality	780 — 793, 795	75
AE 147	All other accidental causes	E910, E911, E913 — E915, E920 — E928, E930 — E965	34
AN 143	Head injury (excluding fracture)	N850 — N856	1
AN 150	All other and unspecified effects of external causes	N950 — N959, N980 — N999	1
Total			438

